

ABSTRACT

Methods and apparatus to detect terminal open circuits and short circuits to ground in inductive head write drivers are presented. A exemplary method is provided for detecting a short-circuit condition at at least one of a pair of write head terminals of a write driver, the write driver producing a write current that, when passed through a inductive head assembly coupled to the pair of write head terminals, polarizes the inductive head according to a direction of the write current. The method includes the step of generating a first current that is proportional to at least a portion of the write current that flows in a first direction into a first write head terminal of the write driver. A second current is generated that is proportional to at least a portion of the write current that flows in a second direction, opposite the first direction, into a second write head terminal of the write driver. A short-circuit condition at at least one of the first and second write head terminals is detected when an average value of the first current is different from an average value of the second current by a predetermined amount.

2014-05-20 10:44:03